

## REMARKS

Examiner Le spoke with the undersigned 11/12 after the filing of the response suggesting amending claim 60 to refer to the computer system using data in the databases, as opposed to being programmed to do so. Accordingly, the applicant files this supplemental amendment, implementing that suggestion.

## CLAIMS

Claims 19-35 and 54-70 are pending.

Claims 19, 25, 54, 60 are the only pending independent claims.

Claims 1-18, 36-53, and 71-78 are canceled.

Upon critical review, the applicant has amended the independent claims to more closely reflect the language of the disclosure. Note for example published paragraph 0058 of this application:

[0058] It is another object of the invention to combine assumed non-transaction demographic data for consumers having transactions with a specified retail store location with block data for the same non-transaction demographic data, for at least one block region geographically close to the retail store location, to estimate the fraction of people having a specified demographic and living in the at least one specified block region that shop in the retail store.

In view of paragraph 0058, the applicant has for example amended the preamble of independent claim 19 to read:

A system for estimating a fraction of people living in a block region near a retail store and having a specified demographic, that shop in the retail store, comprising:

The claims have also been amended to (1) define the step or configuration or programming for assuming a demographic from transaction data for a consumer, and (2) to distinguish between a stored value and a demographic represented by the stored value, as in the following recitation from amended claim 19:

wherein said computer system is programmed to determine from said transaction data associated with the corresponding one of said plurality of consumer records, whether to store a first demographic value in the corresponding first assumed non-transaction demographic data field associating said specified demographic with the corresponding one of said plurality of consumer records;

The applicant notes that the basis for distinguishing between "first demographic value" and "specified demographic" is that a demographic may define for example a range, for example such as income between 30,000 and 50,000 annually, and that such a range is equivalent to a specified demographic, the demographic of people earning between 30,000 and 50,000 annually. This linguistic difficulty suggested clarifying the claim to define the decision whether to store a value indicating a certain demographic be clarified from associating or not associating the demographic with a consumer's record.

Further, the applicant retains reference to "assumed non-transaction" in the claims, because the existence or non existence of a non-transaction demographic for a particular consumer record is assumed from transaction data, since the transaction data, by definition, excludes non-transaction data. See e.g. application publication paragraph 0202.

Similar clarifying amendments are made to all independent claims.

The examiner is requested to review the claims and suggest any further clarifications that may come to mind.

That being said, now turn to the Office Action ( herein after OA).

#### OFFICE ACTION AND SUMMARY OF RESPONSE

OA item 1 notes the claims now pending. The applicant agrees.

OA item 2 makes the restriction final. In response, the applicant cancels with finally withdrawn claims.

OA items 3-5 reject claims 54-70 under 35 USC 101, citing Ex parte Langemyr, as authority. In response, the applicant amends the claims to recite the that calculational steps involving data stored in the databases be performed by the claimed computer system using the data in the databases. The undersigned called and left Examiner Le a voice mail message on 11/11/2010 requesting a teleconference to discuss the 101 rejection and language the examiner would agree would overcome the rejection.

OA items 5-9 reject all claims (19-35 and 54-70) under 35 USC 103 based upon USP 7302419 to Conkwright; US 20010049620 to Blasko; and US 20010014868 to Herz. In response, the applicant traverses as noted below.

OA item 10 cites several other references. No response is necessary.

#### RESPONSE TO 103 REJECTIONS

The OA rejects claim 19 over Conkwright, Blasko, and Herz. Conkwright discloses determining demographics from other demographics using STBs, Blasko discloses profiling vectors and probabilistic demographic determinations. Herz disclose determining and presenting targeted offers to consumers. However, Conkwright, Blasko, and Herz do not disclose or suggest "estimating a fraction of people living in a block region near a retail store and having a specified demographic, that shop in the retail store." As amended, claim 19 expressly defined making that estimation. Claim 19, as amended, reads in relevant part "A system for estimating a fraction of people living in a block region near a retail store and having a specified demographic, that shop in the retail store, comprising: ...means or code ... to estimate said fraction." Conkwright and Blasko have bits and pieces, but fail to disclose "estimating *a fraction of people living in a block region* near a retail store and having a specified demographic, that shop in the retail store" and provide no reason to want to do that, no motivation. Accordingly, amended claim 19 should not be rejected. Copied in below is a chart showing claim 19, supporting language in the specification, and the office action and comments thereon.

Claim 19, interpretation, and citations for rejection, appear in the following chart:

CLAIM	SPECIFICATION	OFFICE ACTION AND COMMENTS
<p>19. (Currently Amended) <del>A system for estimating a fraction of people having a specified demographic value that both shop in a specified retail store and live in a specified block region, comprising:</del> <u>A system for estimating a fraction of people living in a block region near a retail store and having a specified demographic, that shop in the retail store, comprising:</u></p>	<p>"[0059] It is another object of the invention to use the estimate the fraction of people having a specified demographic and living in the at least one specified block region that shop in the retail store location as a basis for deciding whether to target market consumers associated with that non-transaction demographic that live in that specified at least one block region. ... [0212] ... The computer analysis system may also identify the fraction of the number of the store's customers assumed to be in each block region to the total number of consumers in that block region. "</p>	<p>No prior art citation in OA. Determining the fraction is the goal of this claim, and defined by the ultimate recitation of the claim.</p>
<p>a transaction data database;</p>	<p>"[0020] Transaction data, in this application, means data defining a transaction. Transaction data includes price of transaction, description of items purchased, price of items purchased, quantity of each type of item purchased, date of transaction, time of transaction, location of transaction, identity of purchaser, identify of seller, tender type of transaction, etc."</p>	<p>OA: Conkwright, 4:61-67 "users interaction with the STB events". In fact, 4:61-67 states only that "Traditional set-top boxes include a unique identification number ("ID"), and this number can be used by a preferred embodiment of the present invention for identification purposes in lieu of personal information. To facilitate data analysis, a cable company can provide to the present invention a geographically associated code, such as, but not limited to, a zip code or telephone number prefix, that corresponds with each set-top box."</p>

a block data database;	"[0022] Block data, in this application, means data specifying averages, medians, or other statistical measures, by detailed product category and demographic, for a group of people living in a geographic region of a size on the order of a city block or subdivision."	OA, Conkwright, 14:45-60; 21:36-39; 21:59-61; and 23:25-34 "a block database (corresponding to geographical region)"
a computer system having read and write access to said transaction data database and said block data database; and	See Fig. 1, and "[0115] In step 200 a database, such as database 30, receives and stores consumer related data. Alternatively, any one of databases 70 and 80 may receive and stores consumer related data for performing the following steps. "	
wherein said transaction data database stores a plurality of consumer records <u>for customers of said retail store, each one of said plurality of consumer records</u> including at least a CID data (consumer identification data) <u>field</u> indicating a consumer CID, <u>fields for transaction data indicating transactions that occurred in said retail store, and at least and a</u> first assumed non-transaction demographic data field for <u>said specified demographic</u> ; and	""[0020] Transaction data ...." "[0021] Non-transaction demographic data, in this application, means characteristics of people that are not part of transaction data. For example, ... age bracket, gender, race, ethnicity, pet ownership ... income range, type of job or profession, education level, marital status, existence of children in an age bracket, and hobbies." "[0032] In this application, assumed non-transaction demographic associated with a person or a CID means a prediction that the corresponding non-transaction demographic accurately characterizes the person or people associated with the CID."	OA, CID = Conkwright 4:61-67, " STB geo-coded ID" OA, assumed non-transaction demographic data field = Conkwright Abstract, "probable demographic characteristics, see abstract" [0146], "geographically-based databases are well-known". Blasko, [0083, "profiling STB also applies to retail stores". Response: Conkwright does not disclose or suggest assuming values for non transaction demographic fields based upon transaction data.

<p>wherein said computer system is programmed to determine from said transaction data associated with the corresponding one of said plurality of consumer records, whether to store a first demographic value in the corresponding first assumed non-transaction demographic data field associating said specified demographic with the corresponding one of said plurality of consumer records;  <del>storing assumed non-transaction demographic data for customers of said retail store;</del></p>	<p>"[0207] In step 210, system 20 runs software or implements in hardware a form of predictive modeling to analyze a set of data for multiple CD records in database 30. .... The correlations identified above are then used to analyze CID data records wherein the value of the relevant demographic variable is unknown to determine either an assumed value for that variable or probabilities or expectations that the value of the demographic variable has certain values. That is, one or more correlations are used to define a function in the manner already described to generate a probability, prediction, or ranking relative to other records for a demographic variable to assume for a CID. "</p>	<p>New and not addressed in OA. See however Blasko paragraphs 47, 48, "heuristic rules for determining such demographic attributes such as probable gender or age" and use of "probabilistic profile vectors may include demographic attributes indicating probable age, income level, gender, and other demographics" in targeting.</p>
<p>wherein said block data database stores at least one block data record for a geographic region near the location of the retail store, each block data record storing, for its corresponding geographic region, a number of people or consumers residing in that region, <del>and a number of people or consumers having said specified demographic value</del> <u>said specified demographic</u>; and</p>	<p>"[0022] Block data...."          "[0087] ... each block data record storing, for its corresponding geographic region, a number of people or consumers residing in that region, and a number of people or consumers having said specified demographic value...."</p>	<p>OA: Conkwright, 21:56-61; 23:25-34, "database of consumer transactions and has databases organized along geographical parameters with attributes of consumers, and ... determination of percentage of population of a region that falls into a query category".</p>

<p>means or code for using <u>at least</u> data stored in said <u>first assumed non-transaction demographic data fields</u> for records in <del>both</del> said transaction data database and <u>number of people or consumers residing in said region</u> stored in said block data database to estimate said <del>fraction of people having said specified demographic value that both shop in said specified retail store and live in said specified block region.</del></p>	<p>"[0087] ... determining whether to target market to consumers in said geographic region based upon either said number of consumers associated with said specified demographic value that live in said geographic region or an estimate of a ratio of number of consumers associated with said specified demographic value that live in said geographic region to total number of consumers that live in said geographic region...."</p>	<p>OA: Conkwright, 21:56-61; 23:25-34, "database of consumer transactions and has databases organized along geographical parameters with attributes of consumers, and ... determination of percentage of population of a region that falls into a query category".</p> <p>Response: Conkwright, Blasko, and Herz do not disclose or suggest determining said fraction ("<u>of people living in a block region and having a specified demographic, that shop in [the] retail store.</u>")</p>
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Independent claim 54 is a method claim analog of system claim 19 and is similarly amended. Claim 54 should not be rejected for the same reasons applicable to claim 19.

A similar analysis leads to a conclusion that independent system claim 25 and corresponding independent method claim 60 should not be rejected.

Claim 25 recites that:

said computer system programmed to determine whether to target market to either said block region or to at least one consumer residing in said block region based upon at least said estimate of said fraction or said absolute number

wherein "said fraction or said absolute number" is defined by the recitation:

said computer system programmed to use data stored in said specified transaction history variable fields for said plurality of consumer records in said transaction history database, and number of people or consumers residing in said geographic region near the location of said retail store that have a specified value or range of values for said specified transaction history variable stored in said at least one block data record in said block data database, to estimate either a fraction or an absolute number of consumers residing in said block region having transaction data having either said specified value or said range of values for said specified transaction history variable; and

Conkwright, Blasko, and Herz do not disclose or suggest estimating a fraction or an absolute number of people in a block region near a retail store that have a specified transaction variable value or range of values, **or**, making such an estimate from block data for that region near the retail store in conjunction with transaction history data for transactions from that retail store. Since claim 25 defines that concept, claim 25 should not be rejected based upon Conkwright, Blasko, and Herz. As noted above, claim 60 defines the same limitations.

Date: RAN

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